



# Product Specifications



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## Model SB1043PF 21" x 80" Turn-Nado EVS Lathe with DRO

### Product Dimensions

Weight..... 6600 lbs.  
Width (side-to-side) x Depth (front-to-back) x Height..... 130-1/4 x 27 x 62-1/4 in.  
Footprint (Length x Width)..... 141-3/4 x 71-3/4 in.

### Shipping Dimensions

Type..... Wood Crate  
Content..... Machine  
Weight..... 6038 lbs.  
Length x Width x Height..... 141 x 44 x 73 in.

### Electrical

Power Requirement..... 440V, 3-Phase, 60 Hz  
Prewired Voltage..... 440V  
Full-Load Current Rating..... 18.83A  
Minimum Circuit Size..... 30A  
Connection Type..... Permanent (Hardwire to Shutoff Switch)  
Switch Type..... Control Panel w/Magnetic Switch Protection  
Inverter (VFD) Type..... Yaskawa G7A4011  
Inverter (VFD) Size..... 10 HP

### Motors

#### Main

Horsepower..... 12.5 HP  
Phase..... 3-Phase  
Amps..... 18A  
Speed..... 0 – 3000 RPM  
Type..... TEFC Induction  
Power Transfer ..... V-Belt Drive  
Bearings..... Shielded & Permanently Lubricated  
Centrifugal Switch/Contacts Type..... N/A

#### Coolant Pump

Horsepower..... 1/8 HP  
Phase..... 3-Phase  
Amps..... 0.23A  
Speed..... 3450 RPM  
Type..... TEFC Induction (Class F)  
Power Transfer ..... Direct Drive  
Bearings..... Shielded & Permanently Lubricated  
Centrifugal Switch/Contacts Type..... N/A

## Oil Pump

Horsepower.....	1/4 HP
Phase.....	3-Phase
Amps.....	0.6A
Speed.....	1720 RPM
Type.....	TEFC Induction
Power Transfer .....	Direct Drive
Bearings.....	Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type.....	N/A

## Main Specifications

### Operation Info

Swing Over Bed.....	21 in.
Distance Between Centers.....	80 in.
Max Weight Between Centers.....	1430 lbs.
Swing Over Cross Slide.....	14 in.
Swing Over Saddle.....	21 in.
Swing Over Gap.....	31.10 in.
Maximum Tool Bit Size.....	1 in.
Compound Travel.....	5.39 in.
Carriage Travel.....	79 in.
Cross Slide Travel.....	11 in.

### Headstock Info

Spindle Bore.....	3.15 in.
Spindle Taper.....	MT#7
Number of Spindle Speeds.....	Variable
Spindle Speeds.....	18 – 1800 RPM
Spindle Type.....	D1-8 Camlock
Spindle Bearings.....	Tapered Roller
Spindle Length.....	26-7/8 in.
Spindle Length with 3-Jaw Chuck.....	34-1/2 in.
Spindle Length with 4-Jaw Chuck.....	32-3/8 in.
Spindle Length with Faceplate.....	29-1/8 in.

### Tailstock Info

Tailstock Quill Travel.....	6-1/2 in.
Tailstock Taper.....	MT#5
Tailstock Barrel Diameter.....	3 in.

### Threading Info

Number of Longitudinal Feeds.....	15
Range of Longitudinal Feeds.....	0.0015 – 0.0400 in./rev.
Number of Cross Feeds.....	15
Range of Cross Feeds.....	0.00075 – 0.02000 in./rev
Number of Inch Threads.....	38
Range of Inch Threads.....	2 – 72 TPI
Number of Metric Threads.....	40
Range of Metric Threads.....	0.4 – 14.0 mm
Number of Modular Pitches.....	18
Range of Modular Pitches.....	0.3 – 3.5 MP
Number of Diametral Pitches.....	21
Range of Diametral Pitches.....	8 – 44 DP

**Dimensions**

Bed Width.....	13.58 in.
Carriage Leadscrew Diameter.....	1-3/8 in.
Leadscrew TPI.....	4 TPI
Carriage Leadscrew Length.....	105 in.
Steady Rest Capacity.....	5/8 – 7-1/16 in.
Follow Rest Capacity.....	5/8 – 5-1/8 in.
Faceplate Size.....	14 in.
Feed Rod Diameter.....	15/16 in.
Floor to Center Height.....	46.65 in.
Height With Leveling Jacks.....	48 in.

**Construction**

Base.....	Cast Iron
Headstock.....	Cast Iron
End Gears.....	Flame-Hardened Steel
Bed.....	Induction-Hardened, Precision-Ground Meehanite Cast Iron
Body.....	Cast Iron
Stand.....	Cast Iron
Paint Type/Finish.....	Urethane

**Fluid Capacities**

Headstock Capacity.....	15.9 qt.
Headstock Fluid Type.....	ISO 32 (eg. Grizzly T23963, Mobil DTE Light)
Gearbox Capacity.....	3.2 qt.
Gearbox Fluid Type.....	ISO 68 (eg. Grizzly T23962, Mobil Vactra 2)
Apron Capacity.....	2.1 qt.
Apron Fluid Type.....	ISO 68 (eg. Grizzly T23962, Mobil Vactra 2)
Coolant Capacity.....	25.4 qt.

**Other**

Country of Origin .....	Taiwan
Warranty .....	2 Years
Approximate Assembly & Setup Time .....	1 Hour
Serial Number Location .....	ID Label on Rear Side of Left Stand
Sound Rating .....	69 dB
ISO 9001 Factory .....	No
Certified by a Nationally Recognized Testing Laboratory (NRTL) .....	No

## **Features**

- Allen Bradley Electrical Components
- Signature South Bend 3 V-Way Bed
- Safety Chuck Guard with Micro-Switch Shut-Off
- Meehanite Castings with Induction-Hardened Ways
- Halogen Work Light
- 4-Way Tool Post
- Complete Coolant System
- Micrometer Carriage Stop
- Threading Dial Indicator
- SKF Spindle Bearings
- Full Length Splash Guard
- Front Removable Sliding Chip Tray
- Yaskawa G7A4011 Inverter
- Completely Enclosed Universal Gearbox for Cutting Inch, Metric, Modular and Diametral Pitches
- Pressurized Headstock Lubrication System with Oil Pressure Safety Switch
- Dial Controlled, Variable Spindle Speeds with Digital Read Out
- Jog Button and Emergency Stop
- Fagor DRO
- Foot Brake

## **Included Accessories**

- 12" 3-Jaw Scroll Chuck Mounted to 12" D1-8 Back Plate
- 14" 4-Jaw Independent Chuck D1-8
- 14" Faceplate D1-8
- Follow Rest
- Steady Rest with Ball Bearing Tips
- #7 to #5 Morse Taper Spindle Sleeve
- Two Morse Taper #5 Dead Centers (1 Carbon Steel and 1 Carbide-Tipped)
- Eight Leveling Pads
- Service Tools
- Tool Box
- USA Written Manual